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## ABSTRACT

In this paper the author discusses "error-analysis"; its emergence as a recognized technique in applied linguistics, with a function in the preparation of new or improved teaching materials; and its new place in relation to theories of language learning and language teaching. He believes that error-analysis has suddenly found a new importance, and from being mainly a technique for short-circuiting the practical difficulty of bilingual comparison it has become a vital source of information about the progress of a learner towards his eventual competence in the language and a crucial component in the search for adequate theories of language learning and language teaching. (Author/DO)



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TWO WAYS OF LOOKING AT

ERROR-ANALYSIS

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## TWO WAYS OF LOOKING AT ERROR-ANALYSIS

1. When people learn a foreign language, they do not suddenly in a flash become near-native speakers of it. For a long period their speech and writing exhibits characteristics which are not present in the performance of native speakers of that language and are unacceptable to such native speakers. As learning progresses, the nature of these non-native characteristics changes, and eventually their number decreases as the learner's performance approximates more and more to that of the native speaker. These non-native characteristics have been variously referred to as "mistakes", "errors", "deviations", "distortions" or "points of difficulty", sometimes with distinctions of meaning between different terms. In this paper I shall label them all as "errors", and so the theme of this paper can be re-stated as "the systematic analysis and description of those characteristics of the speech and writing of a learner of a foreign language which are unacceptable to native speakers of the language".

The main points to be made in the paper are these: first, that error-analysis has held a particular place in the past in relation to the contrastive analysis of languages; and second, that error-analysis has suddenly assumed a new place in relation to theories of language learning and language teaching.

2. In an informal sense, error-analysis is as old as language teaching. The teacher needs to know as he proceeds with his instruction the extent to which that which he is teaching is being learned. Good teaching, therefore, demands of the teacher that he should continually monitor and assess the performance of his pupils in understanding and using those points of the foreign language that he has just taught. The teacher also monitors the ability of the learner to continue to operate in an acceptable way the points of the language that he has previously learned to handle accurately. And the evidence for the teacher that particular points have not been learned, or that points previously



learned have been forgotten, (1) consists solely of errors, or rather, of the nature, frequency and distribution of errors among otherwise error-free performance in the foreign language. Teachers are accustomed to noticing errors and to adjusting their teaching accordingly. But the technical sense of error-analysis entails a detailed collection, analysis and categorisation of errors made by particular learners in a particular language-learning situation.

3. The development of error-analysis is in part a product of an increasingly rigorous and scientific outlook on two activities, learning and teaching, the former being a reflection of internal psychological processes and the second being essentially a craft skill. The evidence from those who teach about the progress of those who learn is in practice anecdotal and conversational, but it should not be ignored. The accumulated experience of professionals over hundreds of thousands of hours of teaching contains important insights into the nature and occurence of errors, including two observations: first, that the various points of a foreign language presented in a teaching course are not equal in the extent to which they are learned. Some points of a given language are learned without error by the majority of learners, others often or always lead to errors and require special teaching efforts. The second observation is that learners are not equal in their learning of a given point of the language, nor in their overall capacity to learn the language as a whole. Some learners learn most points without error, and require special teaching efforts only in respect of a minority of items of the language. Suppose the ratio of items normally learned-without-error to not-normally-learned-without-error is taken as

The terms "learned" and "forgotten" are not entirely satisfactory. There is a great deal more involved than "learning" versus "forgetting", which carries an undesirable and largely irrelevant undertone of "being able to remember something" versus "no longer being able to remember it". But no better terms yet exist than "learned" and "forgotten". Errors will be regarded here not in terms of "remembering", but as atomistic evidence for incompleteness of acquisition of the foreign language.

4:1; and suppose the ratio of learners normally-learning-most-points-without-error to learners not-normally-learning-most-points-without-error is 4:1, then one can in part characterise foreign language teaching in the following way; some 80% of all items in the foreign language are learned without error by 80% of all learners, while special remedial and re-teaching effort is concentrated on 20% of learners who make errors with all items and 20% of items which are learned with errors by all learners. (2)

The existence of recurrent errors (i.e. items-not-normally-learnedwithout-error) has been known to teachers for a long time, and numerous collections of such errors, often with suggestions for remedial teaching, have been published. These professional observations constitute one source of modern techniques of rigorous error-analysis. The other source is the rise of contrastive analysis as an essential technique in the preparation of language teaching materials. From the publication in 1957 of Lado's Linguistics Across Cultures it became a cardinal point in language teaching based on American structural linguistics that structural analyses should be made of the language being taught and of the native language of the learner, that these analyses would both predict and describe "points of difficulty in learning", and that they would provide an improved basis for the construction of teaching materials. Notice the qualification that contrastive analysis formed the essential basis only of language teaching based on American structural linguistics.(3) Elsewhere, including over the whole of European language

<sup>(2)</sup> The figures are only notional, but by setting some arbitrary value it is possible to see language teaching in perspective as between "successful initial presentation" (of items learned without error) and "remedial teaching" (of items not learned without errors).

The term "structural" lies at the centre of a confusing pun. Structural linguistics in the sense of American neo-Bloomfieldian descriptive techniques, with an amphasis on phonemics and morphemics, was consciously adopted in the United States as a foundation for improved methods of language teaching. In everyday discourse, these methods were often referred to as "structural methods" or "the structural approach".

teaching, the notion of contrastive analyses was seen as a useful occasional technique for the teacher but not the essential basis of teaching materials.

- 5. European linguists and language teachers admired in principle the way in which modern linguistics was being applied to language teaching, but they rejected contrastive analysis as the essential foundation for many reasons, including the following:
  - i) it would follow that complete and exhaustive bilingual comparisons would be needed for each of the very large number of learning and teaching situations that exist, yet the magnitude of the task of preparing even one complete bilingual comparison is so great, and the number of competent linguists is so small, that the proposal is unrealistic and unattainable except for a very small number of cases;
  - ii) the notion of complex procedures for predicing errors seemed ludicrous to many teachers, who believed they already knew from their experience and that of their predecessors what the great majority of errors actually are.

At the same time, it was accepted that there were benefits to be gained in language teaching from the production of linguistically more rigorous descriptions of the language concerned, and that valuable insights could be gained by the teacher from familiarity with detailed linguistic descriptions both of the language he is teaching and of the mother tongue of the learner.

6. Error-analysis came to be regarded in Europe as a more practical means than the production of full contrastive analyses for studying



In European traditions of language teaching, American structural linguistics was never adopted, but the very different methodological and linguistic traditions of Sweet, Jespersen, Palmer and Hornby were themselves often referred to as "the structural approach". Hence the existence of a hidden ambiguity. The American "structural approach" to language teaching owed nothing to the methodology of Palmer, while the European "structural approach" owed nothing to Bloomfieldian linguistics.

those points in the learning and teaching of particular languages which were commonly associated with failure to learn without error. Instead of attempting a full-scale analysis of each of two languages, what was proposed was the collection of large numbers of examples of errors actually committed by a given group of learners, the analysis of this body of points, and the construction of remedial materials (or indeed the re-alignment of teaching courses) in the light of such analyses. (4) What was new about this approach was the use of descriptive linguistics to analyse those points which were involved in common and recurrent errors.

- 7. Three problems arise in any such enterprise. First, how does one define an error? Second, what descriptive basis is most appropriate? Third, how is one to categorise particular errors?
  - (a) The identification of errors is essentially subjective. It is possible for two educated native speakers to differ, in a surprisingly large proportion of cases, as to whether particular items are acceptable or unacceptable, and hence as to whether they should be counted as errors. Consequently the degree of prescriptiveness of the individual analyst greatly affects the number of errors to be categorised.
  - (b) Some linguists believe that there exists a best model for grammatical description and that only this (whatever it is, depending on the linguist's personal preferences) should be used for any descriptive purposes. Other linguists believe

<sup>(4)</sup> A great deal of thought was given to error-analysis at the School of Applied Linguistics of the University of Edinburgh, under the direction of J.C.Catford, between 1959 and 1964. An interesting dissertation entitled Error-analysis was written for the Diploma in Applied Linguistics by David Harper in 1962. See also the dissertation for the M.A. in Applied Linguistics of the University of Essex, 1967, by Mildred E.Thomas, entitled Linguistic Analysis of Errors Printed in Certain Nigerian Newspapers. Neither work makes use of Bloomfieldian structural techniques; both use descriptive linguistic frameworks of a European, largely Firthian kind.

that some linguistic phenomena can be more simply and illuminatingly described according to one model, and other phenomena according to a different model. (5) My view is that error-analysis is a practical task different in nature from theoretical and descriptive linguistics, and that it is legitimate to use any descriptive model or set of models that meet the needs of the case.

- (c) Even describing and categorising errors turns out to present many difficulties. Some errors are obvious, but many are either multiple errors (in the sense that they are e.g. partly grammatical and partly lexical) or are difficult to categorise in any linguistic way.
- So much for the emergence of error-analysis as a recognised tech-8. nique in applied linguistics, with a function in the preparation of new or improved teaching materials. But we should notice one important underlying assumption of error-analysis in the past, an assumption which has recently been questioned. This assumption is that all errors represent undesirable and avoidable shortcomings in the learner's performance in the foreign language. Now suppose that errors were regarded, on the contrary, as normal and inevitable features of learning; suppose, further, that a regular pattern of types of error could be observed in the performance of all learners in a given situation; and suppose, finally, that the progression of a learner through the regular pattern of errors of his learning situation could be taken as evidence not of his failures and shortcomings, but of his success and achievement in learning. Given these suppositions, the function of error-analysis is totally changed. And these or similar suppositions are now being made, as part of the

See Patrick Allen, The role of grammar in English language teaching, Ph.D. thesis (applied linguistics), University of Essex, 1967; also James Rodgers, An analysis of three different teaching descriptions of contemporary English and an assessment of the degree to which they reflect different linguistic theories. Ph.D. thesis, University of Leeds, 1966.

current search for new theoretical models of language learning and language teaching.

- 9. Current views about language learning include these hypotheses: that the individual has a "built-in syllabus" (to quote Corder's paper)<sup>(6)</sup>: a learner-generated sequence of preferred learning, which is independent of the teacher-generated sequence of teaching courses; that the language-learning capacity of the adult is of the same nature as that of the child; that the errors committed by the learner reflect at any moment the stage he has reached in his grasp and "knowledge" of the language; and that the making of errors is "a device the learner uses in order to learn". <sup>(7)</sup>
- 10. Such hypotheses are related in turn to current speculation about the human language learning mechanism. The precise form taken by this speculation is to ask what characteristics would need to be provided if one were to attempt to construct a device that could learn a language: in other words, what are the characteristics of a language acquisition device? Among the attempts at answering this question is a paper by Dr. David Reibel (8) in which he postulates an input of "primary language data", a mechanism for recognising speech from non-speech, a "segmentation criterion" which recognises grammatical and lexical units in surface structure, a "global semantic representation" which enables the learner's experience of the world and his existing awareness of meaning in language to be applied to his further learning, and a "linguistic theory" which regulates the innate language learning principles of the individual. (9)



<sup>(6)</sup> S.Pit Corder, The significance of learners' errors, IRAL, Vol. V. No.4, November 1967.

<sup>(7)</sup> Ibid.

<sup>(8)</sup> D. Reibel, <u>Language learning strategies for the adult</u>. Proceedings of the Second International Congress on Applied Linguistics, Cambridge, 1969 (forthcoming).

<sup>(9)</sup> See also Wilga M. Rivers, Linguistic and Psychological Factors in

11. Many millions of people learn a foreign language in a situation of organised instruction, and not in a "free field." To describe the total situation for them it is necessary to postulate not simply a language acquisition device, but also a language teaching device, with an interface between the two (the interface normally being a classroom). A language teaching device would necessarily begin from native competence in the language being taught/learned, backed up by stored reference material in the form of a pedagogical grammar, bi-lingual dictionary and pronouncing dictionary; these language sources are then subject to restrictions and shaping by a number of factors: by socio-linguistic factors, which reflect the status of the foreign language in the learner's community, the extent of popular awareness and experience of the language, the choice of a particular model (e.g. Standard English with R.P. or with West Indian accent, etc.) and the degree of perfection normally expected in the teaching-learning situation; by factors of educational policy and organisation, which reflect the kind of school or college in which the teaching/learning is taking place, the precise aims of the course, the length of the course, the intensity of the course, the duration of classes, the choice of examination or other terminal assessment, the adoption of a particular syllabus or even course-book; by factors concerning the individual institution, such as the size of classes, availability of aids, suitability of classrooms, degree of distraction through noise, heat, boredom, etc; by factors reflecting the teacher, such as his professional training and experience, his familiarity with the methods and materials used, his personal relations with his pupils, his likelihood of success; and finally by factors reflecting the learner as a member of the institution, reflecting his intelligence, his previous experience of the language (or of learning other languages), his motivation and diligence, his 'set' towards success or failure.

Speech Perception and their Implications for Teaching Materials, Proceedings of the Second International Congress on Applied Linguistics, Cambridge, 1969 (forthcoming).

The output from these successive shapings of the primary language source constitutes both the statement of the maximum approximation to native competence that will be transmitted by the teaching device to the interface (and therefore the maximum approximation transmitted to the language ac uisition device unless additional input of some kind is supplied at the interface), and also a cumulative bias for greater or less effectiveness of teaching-learning. Next the language source is processed by a pair of devices, a quantizer and a sequencer. quantizing device turns the language source from a global notion of "Language L" into a stream, and breaks it into macro-segments (relating to years, terms, months, weeks, lessons) and micro-segments (relating to sections of lessons). The sequencer orders the content of microsegments within the macro-segments, thereby determining, in practice, what is taught first, then next, then next, and so on from the beginning to the end of the language teaching/learning operation. Next there must come a device which examines each micro-segment and selects the most appropriate wile of presentation, at the interface, for each micro-segment. Language learning is of several different kinds: often more than one kind of learning takes place at a given moment. Each different kind of learning can be regarded as having a different input impedance at the interface. So the language teaching device requires an impedance-matching selector for its different micro-segments.

At this point also there must be a feedback loop from the language acquisition device, of such a nature that micro-segments are repeated, and perhaps their sequence varied, according to the learner's progress in learning. The only information capable of serving as input for the feedback loop is data concerning the learner's errors. Finally the primary language data, in the form of a native competence, shaped by various factors, quantized and sequenced into a teaching programme, and adjusted for optimum effectiveness by feedback information based on the learner's errors, reaches the interface and becomes the ideal primary language input for that particular language learner.

12. This, then, is the point of the title of this paper: error-analysis has suddenly found a new importance, and from being mainly a

technique for short-circuiting the practical difficulty of bilingual comparison it has suddenly become a vital source of information about the progress of a learner towards his eventual competence in the language, and a crucial component in our search for adequate theories of language learning and language teaching.

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